

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 15. (Canceled).

16. (Currently Amended) A fixing device comprising:
a core having a plurality of grooves extending in an axial direction;
coil holding bodies each having a hollow cylindrical shape, into which the core is inserted from the axial direction, and covering an outer surface of the core; and
a metal body being positioned so as to generate an eddy current in accordance with a magnetic field provided by a coil body;
a power supply device which supplies ~~the~~ a voltage and ~~the~~ a current at ~~the~~ a predetermined frequency to the coil body; and
a press member which provides a predetermined pressure to the metal body,
wherein the core holds the coil holding bodies,
wherein two coil leads wound around each of the coil holding bodies are connected to the power supply device through different grooves, and
wherein potentials of the two coil leads running through the different grooves are equal.

17. (Previously Presented) A device according to claim 16, wherein the coil holding bodies each has a notch through which a coil passes, at a position corresponding to the groove of the core.

Claim 18. (Cancel).

19. (Original) A device according to claim 16, wherein the number of grooves of the core is the number of circuits + 1.

20. (Original) A device according to claim 16, wherein a sectional area of a groove in which a common side of the same circuit is set is larger than a sectional area of a remaining groove.

21. (Original) A device according to claim 16, wherein a groove in which a non-common side of the same circuit is set is independent for each circuit.

22. (New) A fixing device comprising:
a core having a plurality of grooves extending in an axial direction;
a plurality of coil holding means each having a hollow cylindrical shape, into which the core is inserted from the axial direction, and covering an outer surface of the core; and
metal body means for generating an eddy current in accordance with a magnetic field provided by a coil body;
power supply means for supplying a voltage and a current at a predetermined frequency to the coil body; and
pressing means for providing a predetermined pressure to the metal body means,
wherein the core holds the coil holding means,
wherein two coil leads wound around each of the coil holding means are connected to the power supply means through different grooves, and
wherein potentials of the two coil leads running through the different grooves are equal.

23. (New) A device according to claim 22, wherein each of the coil holding means has a notch through which a coil passes, at a position corresponding to the groove of the core.

24. (New) A device according to claim 22, wherein the number of grooves of the core is the number of circuits + 1.

25. (New) A device according to claim 22, wherein a sectional area of a groove in which a common side of the same circuit is set is larger than a sectional area of a remaining groove.

26. (New) A device according to claim 22, wherein a groove in which a non-common side of the same circuit is set is independent for each circuit.

27. (New) A method of manufacturing a fixing device, comprising:
providing a core having a plurality of grooves extending in an axial direction;
inserting the core from an axial direction into coil holding bodies each having a hollow cylindrical shape, and covering an outer surface of the core;
positioning a metal body so as to generate an eddy current in accordance with a magnetic field provided by a coil body,
supplying, by way of a power supply device, a voltage and a current at a predetermined frequency to the coil body;
providing a predetermined pressure to the metal body;
connecting the coil holding bodies to the power supply device through different grooves; and
winding two coil leads around each of the coil holding bodies,
wherein the core holds the coil holding bodies, and
wherein potentials of the two coil leads running through the different grooves are equal.

28. (New) A method according to claim 27, further comprising:
creating a notch in each of the coil holding bodies through which a coil passes, at a position corresponding to the groove of the core.

29. (New) A method according to claim 27, wherein the number of grooves of the core is the number of circuits + 1.

30. (New) A method according to claim 27, wherein a sectional area of a groove in which a common side of the same circuit is set is larger than a sectional area of a remaining groove.

31. (New) A method according to claim 27, wherein a groove in which a non-common side of the same circuit is set is independent for each circuit.